

Specification (Amended Under PCT 34)

The present invention has been accomplished in view of the above problems and it is an object of the invention to provide an information playback apparatus and an information playback method  
5 capable of playing back presentation data even when a mistake or an error has occurred in playback control data during the playback of digital contents.

Means for Solving the Problem

[0015]

10 An invention recited in claim 1 is an information playback apparatus for playing back contents formed by including one or more data sets having a plurality of files for storing presentation data and having playback control data for managing contents of each of said files, said information playback apparatus comprising: signal  
15 processing means for performing a playback of said presentation data in accordance with control contents of said playback control data; abnormality detecting means for detecting whether there is an abnormality in said playback control data; control means for, when said signal processing means is playing back said presentation  
20 data and once said abnormality detecting means detects an abnormality in said playback control data, detecting a data set to which the playback control data containing said abnormality belongs, and causing the signal processing means to perform a playback from the presentation data stored in an initial file belonging to the detected  
25 data set, without following said playback control data belonging

to the detected data set.

[0016]

An invention recited in claim 2 is an information playback apparatus for playing back contents formed by including one or more data units having presentation data and playback control data for managing the contents of the presentation data, said information playback apparatus comprising: signal processing means for performing a playback of said presentation data in accordance with control contents of said playback control data; abnormality detecting means for detecting whether there is an abnormality in said playback control data; and control means for, when said signal processing means is playing back said presentation data and once said abnormality detecting means detects an abnormality in said playback control data, detecting a data unit to which the playback control data containing said abnormality belongs, and causing the signal processing means to continue a playback from the presentation data belonging to the detected data unit, without following said playback control data belonging to the detected data unit.

[0017]

An invention recited in claim 3 is an information playback apparatus for playing back contents formed by including one or more data sets having a plurality of files and first playback control data for managing contents of each of said files, and including one or more data units in which said files have presentation data and second playback control data for managing contents of said

presentation data, said information playback apparatus comprising:  
signal processing means for performing a playback of said  
presentation data in accordance with control contents of said first  
and second playback control data; abnormality detecting means for  
5 detecting whether there is an abnormality in said first and second  
playback control data; and control means for, when said signal  
processing means is playing back said presentation data and once  
said abnormality detecting means detects an abnormality in said  
first playback control data, detecting a data set to which the first  
10 playback control data containing said abnormality belongs, and  
causing the signal processing means to perform a playback from the  
presentation data stored in an initial file belonging to the detected  
data set, without following said playback control data belonging  
to the detected data set, and for, when said signal processing means  
15 is playing back said presentation data and once said abnormality  
detecting means detects an abnormality in said second playback  
control data, detecting a data unit to which the second playback  
control data containing said abnormality belongs, and causing the  
signal processing means to continue the playback from the  
20 presentation data belonging to the detected data unit, without  
following said playback control data belonging to the detected data  
unit.

25 [0021]

An invention recited in claim 7 is an information playback method for playing back contents formed by including one or more data units having presentation data and playback control data for managing the contents of the presentation data, said information  
5 playback method comprising: a signal processing step for performing a playback of said presentation data in accordance with control contents of said playback control data; an abnormality detecting step for detecting whether there is an abnormality in the playback control data; a control step for, when in said signal processing  
10 step said presentation data is being played back and once said abnormality detecting step detects an abnormality in said playback control data, detecting a data unit to which the playback control data containing said abnormality belongs, and continuing in the signal processing step a playback from the presentation data whose  
15 playback control data was specified when the abnormality was detected, without following said playback control data belonging to the detected data unit.

[0022]

An invention recited in claim 8 is an information playback  
20 method for playing back contents formed by including one or more data sets having a plurality of files and first playback control data for managing contents of each of said files, and including one or more data units in which said files have presentation data and second playback control data for managing contents of said  
25 presentation data, said information playback method comprising:

a signal processing step for performing a playback of said presentation data in accordance with control contents of said first and second playback control data; an abnormality detecting step for detecting whether there is an abnormality in said first and second playback control data; and a control step for, when in said signal processing step said presentation data is being played back and once said abnormality detecting step detects an abnormality in said first playback control data, detecting a data set to which the first playback control data containing said abnormality belongs, and performing in said signal processing step a playback of the presentation data stored in an initial file belonging to the detected data set, without following said playback control data belonging to the detected data set, and for, when in said signal processing step said presentation data is being played back and once said abnormality detecting step detects an abnormality in said second playback control data, detecting a data unit to which the second playback control data containing said abnormality belongs, and continuing in the signal processing step the playback from the presentation data belonging to the detected data unit, without following said playback control data belonging to the detected data unit.

[0023]

An invention recited in claim 11 is a program for causing a computer to play back contents formed by including one or more data sets having a plurality of files for storing presentation data and

having playback control data for managing contents of each of said files, said program comprising: a signal processing step for causing said computer to play back said presentation data in accordance with control contents of said playback control data; an abnormality  
5 detecting step for causing the computer to detect whether there is an abnormality in the playback control data; and a control step for, when said computer uses said signal processing step to play back said presentation data and once said abnormality detecting step detects an abnormality in said playback control data, detecting  
10 a data set to which the playback control data containing said abnormality belongs, and using the signal processing step to play back the presentation data stored in an initial file belonging to the detected data set, without following said playback control data belonging to the detected data set.

15 [0024]

An invention recited in claim 12 is a program for causing a computer to play back contents formed by including one or more data units having presentation data and playback control data for managing the contents of the presentation data, said program comprising:  
20 a signal processing step for causing said computer to play back said presentation data in accordance with control contents of said playback control data; an abnormality detecting step for causing said computer to detect whether there is an abnormality in the playback control data; a control step for, when said computer uses said signal  
25 processing step to play back said presentation data and once said

abnormality detecting step detects an abnormality in said playback control data, detecting a data unit to which the playback control data containing said abnormality belongs, and using the signal processing step to continue a playback from the presentation data whose playback control data was specified when the abnormality was detected, without following said playback control data belonging to the detected data unit.

[0025]

An invention recited in claim 13 is a program for causing a computer to play back contents formed by including one or more data sets having a plurality of files and first playback control data for managing contents of each of said files, and including one or more data units in which said files have presentation data and second playback control data for managing contents of said presentation data, said program comprising: a signal processing step for causing said computer to play back said presentation data in accordance with control contents of said first and second playback control data; an abnormality detecting step for causing said computer to detect whether there is an abnormality in said first and second playback control data; and a control step for, when said computer uses said signal processing step to play back said presentation data and once said abnormality detecting step detects an abnormality in said first playback control data, detecting a data set to which the first playback control data containing said abnormality belongs, and using said signal processing step to play back the presentation

data stored in an initial file belonging to the detected data set,  
without following said playback control data belonging to the  
detected data set, and for, when said computer uses said signal  
processing step to play back said presentation data and once said  
5 abnormality detecting step detects an abnormality in said second  
playback control data, detecting a data unit to which the second  
playback control data containing said abnormality belongs, and using  
the signal processing step to continue the playback of the  
presentation data belonging to the detected data unit, without  
10 following said playback control data belonging to the detected data  
unit.

15

20

25



Claims (Amended Under PCT 34)

1. An information playback apparatus for playing back contents  
5 formed by including one or more data sets having a plurality of  
files for storing presentation data and having playback control  
data for managing contents of each of said files, said information  
playback apparatus comprising:

signal processing means for performing a playback of said  
10 presentation data in accordance with control contents of said  
playback control data;

abnormality detecting means for detecting whether there is  
an abnormality in said playback control data; and

control means for, when said signal processing means is playing  
15 back said presentation data and once said abnormality detecting  
means detects an abnormality in said playback control data, detecting  
a data set to which the playback control data containing said  
abnormality belongs, and causing the signal processing means to  
perform a playback from the presentation data stored in an initial  
20 file belonging to the detected data set, without following said  
playback control data belonging to the detected data set.

2. An information playback apparatus for playing back contents  
formed by including one or more data units having presentation data  
25 and playback control data for managing the contents of the

presentation data, said information playback apparatus comprising:

signal processing means for performing a playback of said presentation data in accordance with control contents of said playback control data;

5 abnormality detecting means for detecting whether there is an abnormality in said playback control data; and

control means for, when said signal processing means is playing back said presentation data and once said abnormality detecting means detects an abnormality in said playback control data, detecting  
10 a data unit to which the playback control data containing said abnormality belongs, and causing the signal processing means to continue a playback from the presentation data whose playback control data was specified when the abnormality was detected, without following said playback control data belonging to the detected data  
15 unit.

3. An information playback apparatus for playing back contents formed by including one or more data sets having a plurality of files and first playback control data for managing contents of each  
20 of said files, and including one or more data units in which said files have presentation data and second playback control data for managing contents of said presentation data, said information playback apparatus comprising:

signal processing means for performing a playback of said  
25 presentation data in accordance with control contents of said first

and second playback control data;

abnormality detecting means for detecting whether there is an abnormality in said first and second playback control data; and

control means for, when said signal processing means is playing  
5 back said presentation data and once said abnormality detecting means detects an abnormality in said first playback control data, detecting a data set to which the first playback control data containing said abnormality belongs, and causing the signal processing means to perform a playback from the presentation data  
10 stored in an initial file belonging to the detected data set, without following said playback control data belonging to the detected data set,

and for, when said signal processing means is playing back said presentation data and once said abnormality detecting means detects  
15 an abnormality in said second playback control data, detecting a data unit to which the second playback control data containing said abnormality belongs, and causing the signal processing means to continue the playback from the presentation data belonging to the detected data unit, without following said playback control data  
20 belonging to the detected data unit.

7. An information playback method for playing back contents formed by including one or more data units having presentation data and playback control data for managing the contents of the presentation  
25 data, said information playback method comprising:

a signal processing step for performing a playback of said presentation data in accordance with control contents of said playback control data;

an abnormality detecting step for detecting whether there is  
5 an abnormality in the playback control data; and

a control step for, when in said signal processing step said presentation data is being played back and once said abnormality detecting step detects an abnormality in said playback control data, detecting a data unit to which the playback control data containing  
10 said abnormality belongs, and continuing in the signal processing step a playback from the presentation data whose playback control data was specified when the abnormality was detected, without following said playback control data belonging to the detected data unit.

15

8. An information playback method for playing back contents formed by including one or more data sets having a plurality of files and first playback control data for managing contents of each of said files, and including one or more data units in which said files  
20 have presentation data and second playback control data for managing contents of said presentation data, said information playback method comprising:

a signal processing step for performing a playback of said presentation data in accordance with control contents of said first  
25 and second playback control data;

an abnormality detecting step for detecting whether there is an abnormality in said first and second playback control data; and

a control step for, when in said signal processing step said presentation data is being played back and once said abnormality

5 detecting step detects an abnormality in said first playback control data, detecting a data set to which the first playback control data containing said abnormality belongs, and performing in said signal processing step a playback of the presentation data stored in an initial file belonging to the detected data set, without following  
10 said playback control data belonging to the detected data set,

and for, when in said signal processing step said presentation data is being played back and once said abnormality detecting step detects an abnormality in said second playback control data, detecting a data unit to which the second playback control data  
15 containing said abnormality belongs, and continuing in the signal processing step the playback from the presentation data belonging to the detected data unit, without following said playback control data belonging to the detected data unit.

20 9. The information playback method according to any one of claims 6 to 8, wherein said contents are recorded in a storage medium.

10. The information playback method according to any one of claims 6 to 8, wherein said contents are supplied through transmission  
25 media.

11. A program for causing a computer to play back contents formed by including one or more data sets having a plurality of files for storing presentation data and having playback control data for managing contents of each of said files, said program comprising:

5 a signal processing step for causing said computer to play back said presentation data in accordance with control contents of said playback control data;

an abnormality detecting step for causing the computer to  
10 detect whether there is an abnormality in the playback control data;  
and

a control step for, when said computer uses said signal processing step to play back said presentation data and once said abnormality detecting step detects an abnormality in said playback  
15 control data, detecting a data set to which the playback control data containing said abnormality belongs, and using the signal processing step to play back the presentation data stored in an initial file belonging to the detected data set, without following said playback control data belonging to the detected data set.

20

12. A program for causing a computer to play back contents formed by including one or more data units having presentation data and playback control data for managing the contents of the presentation data, said program comprising:

25 a signal processing step for causing said computer to play

back said presentation data in accordance with control contents of said playback control data;

an abnormality detecting step for causing said computer to detect whether there is an abnormality in the playback control data;

5 and

a control step for, when said computer uses said signal processing step to play back said presentation data and once said abnormality detecting step detects an abnormality in said playback control data, detecting a data unit to which the playback control data containing said abnormality belongs, and using the signal processing step to continue a playback from the presentation data whose playback control data was specified when the abnormality was detected, without following said playback control data belonging to the detected data unit.

15

13. A program for causing a computer to play back contents formed by including one or more data sets having a plurality of files and first playback control data for managing contents of each of said files, and including one or more data units in which said files have presentation data and second playback control data for managing contents of said presentation data, said program comprising:

a signal processing step for causing said computer to play back said presentation data in accordance with control contents of said first and second playback control data;

25 an abnormality detecting step for causing said computer to

detect whether there is an abnormality in said first and second playback control data; and

a control step for, when said computer uses said signal processing step to play back said presentation data and once said  
5 abnormality detecting step detects an abnormality in said first playback control data, detecting a data set to which the first playback control data containing said abnormality belongs, and using said signal processing step to play back the presentation data stored in an initial file belonging to the detected data set, without  
10 following said playback control data belonging to the detected data set,

and for, when said computer uses said signal processing step to play back said presentation data and once said abnormality detecting step detects an abnormality in said second playback control  
15 data, detecting a data unit to which the second playback control data containing said abnormality belongs, and using the signal processing step to continue the playback of the presentation data belonging to the detected data unit, without following said playback control data belonging to the detected data unit.

20  
14. The program according to any one of claims 11 to 13, wherein said contents are recorded in a storage medium subjected to information playback in said computer.

25 15. The program according to any one of claims 11 to 13, wherein



said contents are supplied to said computer through transmission media.